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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/830,229	04/22/2004	Masayoshi Umeda	42530-7000	7764
21611 7590 03/17/2008 SNELL & WILMER LLP (OC) 600 ANTON BOULEVARD SUITE 1400 COSTA MESA, CA 92626			EXAMINER KUMAR, KALYANAVENKA K	
			ART UNIT 3653	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/830,229

**Applicant(s)**

UMEDA, MASAYOSHI

**Examiner**KALYANAVENKATESHWAR  
KUMAR**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 27 and 28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 4/22/2004
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Newly submitted claims 27 and 28 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:  
Claim 27, line 17, recites, "a drawing roller unit is located downstream from the separating roller unit and is located above the rotating belt to contact coins, the drawing roller unit is adjacent the peripheral surface of the separating roller unit and is rotatable on a second lever which is pivotable and coaxially to the separating roller unit," is distinct feature from the invention originally claimed.
2. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 27 and 28 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 18 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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5. Claim 18 recites the limitation, "the drawing auxiliary unit," in line 2. There is insufficient antecedent basis for this limitation in the claim.
6. Claim 19 recites the limitations, "has a distance which is, at most, thinner than the thinnest coin and is located away from the second coin transporting unit. It is unclear what, "a distance," is referring to and in which location the second coin transporting unit is located away from the drawing auxiliary unit.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 2, 4, 6-8, 10-12, 14, 15, 17, 20, 21, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Furukawa (USP 6,086,472)** in view of **Stoltz et al (USP 6,059,650)**.
9. Regarding claims 1, 2, 4, 6, 7, 10-12, 14, 15, 17, 20, 21, and 26 Furukawa discloses coin separating unit comprising: a coin transporting unit (12) for receiving coins of different size on a support surface that translates the coins for subsequent processing, the support surface having a predetermined flexibility and friction characteristic to engage the coins for translation and to enable coin movement transverse to a direction of movement (a belt would be inherently capable of having flexibility in order to run around the rollers and therefore when coins are pressed into the

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belt, it will flex and move away and further help prevent jams); a separating roller unit rigidly fixed above the support surface and rotates so that its surface closest to the support surface is moving opposite to the translation direction of the support surface (see Fig.2, element 15), the surface of the separating roller unit closest to the support surface moving in a direction opposite to the movement of the support surface (see Fig. 2), but Furukawa does not disclose the separating roller unit positioned above the support surface at a distance no greater than twice the thickness of the coins to be separated and a supporter unit includes a roller member mounted on a pivotable lever operatively located upstream of the separating roller unit, relative to movement of the support surface and adjacent the separating roller unit, the supporter unit is movably located above the support surface by a distance which approximates the thickness of the coins to be separated wherein the supporter unit can move transverse to the support surface when engaging a coin and can assist in preventing more than one coin from passing beneath it before the coin engages the separating roller unit, the separating roller unit and the roller member rotates about parallel axes extending across the support surface whereby the separating roller unit and the roller member when contacting a coin in translation. Stoltz teaches the separating roller unit positioned above the support surface at a distance no greater than twice the thickness of the coins to be separated (col. 4, lines 41-46) and a supporter unit (111) includes a roller member mounted on a pivotable lever operatively located upstream of the separating roller unit (the supporter unit and separating unit are spring biased, col. 10, lines 10-17, the supporter unit is freewheeling and therefore capable making contact and rotating with

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the rotatable belt), relative to movement of the support surface and adjacent the separating roller unit, the diameter of the separating roller is twice a diameter of the supporter unit (see Fig. 4, elements 111 versus 112), the supporter unit is movably located above the support surface by a distance which approximates the thickness of the coins to be separated wherein the supporter unit can move transverse to the support surface when engaging a coin and can assist in preventing more than one coin from passing beneath it before the coin engages the separating roller unit, the separating roller unit and the roller member rotates about parallel axes (see Fig. 4) extending across the support surface whereby the separating roller unit and the roller member when contacting a coin in translation for the purpose of singulating the feeding of coins (col. 10, lines 10-17). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Furukawa's coin separating unit with a support unit, as taught by Stoltz, for the purpose of singulating the feeding of coins.

10. Regarding claim 8, Furukawa discloses a second coin transporting unit (16) for receiving a coin from the first coin transporting unit and translating the coin at a faster speed than the first coin translating unit (col. 2, lines 52-53).

11. Regarding claims 5 and 13, the claims have been canceled.

12. Claim 3, 16, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa in view of Stoltz as applied to claim 1 above, and further in view of **Shirasawa (USP 5,355,988)**.

13. Regarding claims 3, 16, 18, and 19 as best understood by the Examiner, Furukawa/Stoltz discloses all the limitations of the claims as stated above, but Furukawa/Stoltz does not disclose a coin drawing auxiliary unit, which is a roller, located downstream of the separating roller unit and a second coin transporting unit beneath the drawing auxiliary unit and has a distance which is, at most, thinner than the thinnest coin and is located away from the second coin transporting unit. Shirasawa teaches a coin drawing auxiliary unit, which is a roller (57), located downstream of the separating roller unit and a second coin transporting unit beneath the drawing auxiliary unit (see Figs. 4-6) and has a distance which is, at most, thinner than the thinnest coin and is located away from the second coin transporting unit for the purpose of maintaining the direction of the coins (col. 4, lines 22-26). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Furukawa/Stoltz's coin separating unit to include a drawing auxiliary unit, as taught by Shirasawa, for the purpose of maintaining the direction of the coins.

14. Claim 9, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa in view of Stoltz as applied to claim 1 above, and further in view of **DeVries et al (US Pub 2004/0134757 A1)**.

15. Regarding claims 9, 22, and 23, Furukawa/Stoltz discloses all the limitations of the claims stated above and also including a coin hopper for receiving various coins of different sizes in bulk (11), but Furukawa/Stoltz does not disclose a pivoting support member with an elongated surface for supporting an underside of the rotating belt. DeVries teaches a pivoting support member with an elongated surface for supporting an

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underside of the rotating belt (19) for the purpose of keeping the conveyor belts free of debris (see Abstract). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Furukawa/Stoltz with a pivoting support member, as taught by DeVries, for the purpose of keeping the conveyor belts free of debris.

16. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa in view of Stoltz as applied to claim 11 above, and further in view of **Takahashi et al (USP 5,595,284)**.

17. Regarding claim 24, Furukawa/Stoltz discloses all the limitations of the claims, but Furukawa/Stoltz does not disclose the rotatable flexible belt is formed with a urethane rubber surface and a polyamide core. Takahashi teaches a urethane rubber surface (col. 1, lines 8-11) a polyamide core (col. 1, lines 12-23) for the purpose of making a stronger but more durable conveyor belt (col. 2, lines 42-49). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Furukawa/Stoltz's belt to be a urethane rubber surface with a polyamide core, as taught by Takahashi, for the purpose of making a stronger but more durable conveyor belt.

18. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa in view of Stoltz as applied to claim 1 above, and further in view of **Yano (USP 6,467,767)**.

19. Regarding claim 25, Furukawa/Stoltz discloses all the limitations of the claims, but Furukawa/Stoltz does not disclose a one way clutch member provides rotation to the



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separating roller. Yano teaches a one way clutch member provides rotation to the separating roller for the purpose of regulating separation of the articles (col. 11, lines 13-15). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Furukawa/Stoltz's separating roller to have a one way clutch, as taught by Yano, for the purpose of regulating separation of the articles.

### ***Response to Arguments***

20. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kalyan Kumar whose telephone number is 571-272-8102. The examiner can normally be reached on Mon-Fri 7:00AM-3:30PM.

22. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on 571-272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

23. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Supervisory Patent Examiner, Art  
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Kalyan Kumar

Examiner

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